13.Courses of Study and Scheme of Assessment
M.E. EMBEDDED AND REAL-TIME SYSTEMS

(2021 REGULATIONS)

(Minimum No. of credits to be earned: 70*)

Course Code	Course Title	Periods/Week			Credits	Maximum Marks			CAT
		Lecture	Tutorial	Practical		CA	FE	Total	
III SEMESTER									
21EE__	Professional Elective IV	3	-	-	3	50	50	100	PE
21EE__	Open Elective	3	-	-	3	50	50	100	OE
21EE71	Project Work I	-	-	12	6	100	-	100	EEC
Total 18 Periods		**6**	**-**	**12**	**12**	**200**	**100**	**300**	
IV SEMESTER									
21EE81	Project Work II	-	-	24	12	50	50	100	EEC
Total 24 Periods		**-**	**-**	**24**	**12**	**50**	**50**	**100**	
PROFESSIONAL ELECTIVE THEORY COURSES (Four to be opted)									
21EE21	Internet of Things	3	-	-	3	50	50	100	PE
21EE22	Totally Integrated Automation	3	-	-	3	50	50	100	PE
21EE23	Industrial Drives for Automation	3	-	-	3	50	50	100	PE
21EE24	Computer Architecture and Parallel Processing	3	-	-	3	50	50	100	PE
21EE25	Python for Embedded Systems	3	-	-	3	50	50	100	PE
21EE26	Artificial Intelligence	3	-	-	3	50	50	100	PE
21EE27	Multi-core Embedded Systems	3	-	-	3	50	50	100	PE
21EE28	Robotic Process Automation	3	-	-	3	50	50	100	PE
21EE29	Advanced Embedded Controllers	3	-	-	3	50	50	100	PE
21EE30	Blockchain Technology	3	-	-	3	50	50	100	PE
21EE31	Automotive Embedded Systems	3	-	-	3	50	50	100	PE
21EE32	Automotive Software Architecture	3	-	-	3	50	50	100	PE
21EE33	Graphical Programming for Real-Time Applications	3	-	-	3	50	50	100	PE
21EE34	Industrial Networking and Standards	3	-	-	3	50	50	100	PE
21EE35	Internetworking and its Applications	3	-	-	3	50	50	100	PE
21EE36	Wireless Sensor Networks	3	-	-	3	50	50	100	PE
21EE37	Wireless and Mobile Communication	3	-	-	3	50	50	100	PE
21EE38	Cryptography and Network Security	3	-	-	3	50	50	100	PE
21EE39	Advanced Digital Signal Processing	3	-	-	3	50	50	100	PE
21EE40	Computer Vision	3	-	-	3	50	50	100	PE
21EE41	Graph Theory and Applications	3	-	-	3	50	50	100	PE
21EE42	Optimization Techniques	3	-	-	3	50	50	100	PE
21EE43	Digital Controllers for Power Electronics	3	-	-	3	50	50	100	PE
21EE44	Smart Grid Technologies	3	-	-	3	50	50	100	PE

21EE45	Soft Computing	3	-	-	3	50	50	100	PE
21EE46	Machine Learning and its Applications	3	-	-	3	50	50	100	PE
21EE47	E-Mobility	3	-	-	3	50	50	100	PE
OPEN ELECTIVE THEORY COURSES (One to be opted)									
21EE91	Business Analytics	3	-	-	3	50	50	100	OE
21EE92	Electronic Waste Management	3	-	-	3	50	50	100	OE
21EE93	Industrial Safety and Standards	3	-	-	3	50	50	100	OE
21EE94	Innovation and Product Development	3	-	-	3	50	50	100	OE

***** Indicated is the minimum number of credits to be earned by a student.

CAT – Category; PC – Professional Core; PE - Professional Elective, EEC – Employability Enhancement Course; MC - Mandatory Course; RMC – Research Methodology Course; Grade – Completed / Not Completed; OE – Open Elective